

**Remarks**

This Amendment is in response to the non-final Office action mailed February 13, 2006. The present Amendment amends claims 11, 30, 31, 32, 42, 51, 52, 56, 57, and 58 to correct minor matters of form without changing the scope of the claims. Claims 1, 5-13, 27 and 29-58 are presently pending in the application, each of which is believed to be in condition for allowance. Reconsideration in light of the present Amendment and following remarks are respectfully requested.

***Withdrawal of Claims 52-58***

The Office action indicates that claims 52-58 have been withdrawn from consideration because these claims are directed toward a non-elected invention. Reconsideration of this withdrawal is respectfully requested.

The Office action states that claims 52-58 are "directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: *selecting the mute interval; automatically un-muting the voice communication on the call.*" See page 2 of the Office action (emphasis added). Independent claim 52 recites:

A remote method of determining a geographic location of a wireless telephone mobile unit without intervention by a user of the mobile unit, the method comprising the steps of:

at the mobile unit, receiving a location query via the wireless telecommunications network serving the mobile unit;  
responsive to the location query, downloading location data from a GPS unit coupled to the wireless telephone mobile unit; and  
transmitting the location data via said wireless telecommunications network.

Neither independent claim 52 nor dependent claims 53-58 recite the proffered limitations, namely "selecting the mute interval" or "automatically un-muting the voice communication on the call," cited as the reasons for the election requirement. Thus, it is unclear how claims 52-58 are directed to an independent and distinct invention as alleged in the Office action. See M.P.E.P. § 814 ("The examiner must provide a clear and detailed record of the restriction requirement to provide a clear demarcation between restricted inventions ..."). Withdrawal of the election requirement is therefore courteously solicited.

***Objection under 35 U.S.C. § 132(a)***

The Office action states that the November 21, 2005 Amendment is objected to under 35 U.S.C. § 132(a) because the Amendment introduces new matter into the disclosure. Specifically, the Office action states that claims 44-51 introduce new matter by reciting "automatically un-muting the voice communication on the call." This objection is respectfully traversed.

As originally disclosed in paragraph 36 of the specification, "the phone mutes the preexisting call, and uses the existing voice call to the call center to transmit the data. ... In step 230, the Call Center Server sends an acknowledgement signal back to the phone when the end of the sent data string has been received. This triggers the phone to de-activate the mute function, so that any pre-existing call may continue." Thus, an acknowledgment signal from the Call Center Server triggers the phone to automatically deactivate the mute function. The limitation in claim 44, "automatically un-muting the voice communication on the call," is not new matter in light of paragraph 36. Withdrawal of this objection is therefore respectfully requested.

***Claim Rejections – 35 U.S.C. §102(e)***

The Office action rejects claims 1, 5-13, 27, and 29-51 as allegedly anticipated by U.S. Patent No. 6,799,050 to Krasner (Krasner) under 35 U.S.C. § 102(e). This rejection is respectfully traversed.

**A. The Krasner Combined GPS Receiver and Communication System**

Krasner discloses a combined GPS receiver and communication device. The device reduces cross-interference between the GPS receiver and communication transceiver by disabling either the GPS receiver or the communication transmit circuitry of the communication transceiver while the other is operating. *See, e.g.*, col. 7, lines 14-19 of Krasner. For example, if a button is depressed on the device or there is a pause in speech, voice data transmission is disabled and GPS reception and processing is enabled. *See, e.g.*, col. 8, lines 22-26. Additionally, Krasner discloses that the "[c]ommunication transceiver 109 transmits navigational data processed by the GPS receiver 130 through communication signals (typically RF) to a remote basestation ..." *See* col. 3, lines 33-36.

**B. Claims 1, 5-13**

Claim 1 reads:

A method of wireless communication of digital data comprising:  
providing a mobile unit comprising an accessory device coupled to a wireless telephone handset and operable to communicate in a plurality of alternative modes of digital wireless communication, including at least one packet data mode and a voice mode for establishing a call over a voice channel;  
operating the mobile unit to assess at least a selected characteristic of each of the alternative modes;  
based on the assessment, determining a preferred mode; and  
if the preferred mode is the voice mode, transmitting a first digital data set from the mobile unit via the voice mode without significantly interrupting human speech communications over the same voice channel call.

On the other hand, Krasner fails to disclose, teach or suggest all of the limitations of claim 1. For example, as discussed below, Krasner fails to disclose *at least* 1. assessing and selecting a mode of communication based on selected characteristics, 2. transmitting a data set via a voice mode, and 3. transmitting data over a same voice channel call without significantly interrupting speech.

1. *Krasner fails to disclose "operating the mobile unit to assess at least a selected characteristic of each of the alternative modes" and "based on the assessment, determining a preferred mode"*

An example of assessing modes is illustrated in paragraphs 31 and 32 of the specification which states:

[T]he accessory queries the phone to determine which communications modes the phone supports ... includ[ing] possible analog or digital voice communication modes, and data transmission and receipt modes such as packet data modes. ... Consequently, the accessory has a good understanding of the phone's transmission capabilities and can use any of them based on its configured preferences.

As examples of configured preferences, paragraph 32 states that "the user can configure the accessory to use the phone's voice capability when he dials 911" or "[t]he user can further configure the accessory to use GPRS when using his credit card to purchase an item."

Paragraph 38 also gives examples of characteristics that the mobile unit assesses for each mode to determine a preferred mode. Among the characteristics are "the availability of bandwidth of alternative modes, the speed of transmission ..., the criticality of data to be transmitted, the robustness against data errors, the least cost, present availability, latency inherent

from the network available resources or lack of the base station signal strength to the cellular phone, user preferences, cellular carrier preferences, data type (i.e. credit card number), and cellular roaming status.”

In contrast, although Krasner discloses transmitting voice data and receiving GPS data, *see, e.g.*, col. 5, lines 46-53, Krasner fails to disclose, teach, or suggest “operating the mobile unit to *assess at least a selected characteristic of each of the alternate modes*” as recited in claim 1. Moreover, although Krasner discloses that the GPS processing interval is adaptable based on SPS signal strength, *see* col. 9, lines 4-17, Krasner fails to disclose “based on the assessment, *determining a preferred mode*” referred to in claim 1.

2. *Krasner fails to disclose “if the preferred mode is the voice mode, transmitting a first digital data set from the mobile unit via the voice mode without significantly interrupting human speech communications over the same voice channel call”*

In addressing the above language of the claim, the Office action alleges that “Krasner discloses the preferred mode is the voice mode, transmit data set for the mobile unit (150) *in alternative way* [sic] without significantly interrupting human speech communications over the same voice channel call (col. 8 line 8-col. 11 line 40 and figures 4-6).” See page 3 of the Action (emphasis added). It is unclear what the Office action means by “transmit data ... in alternative way.” Claim 1 clearly recites “transmitting ... data ... via the voice mode.”

In fact, Krasner teaches the opposite of “*transmitting a ... digital data set ... via the voice mode* without significantly interrupting human speech communications *over the same voice channel call*.” Krasner discloses that *voice data transmission is disabled* and processing from the GPS receiver is enabled to avoid cross interference. *See* col. 8, lines 22-26. Clearly Krasner would not be able to transmit data over a voice channel call that is disabled.

Further, Krasner teaches that during the disabling of the voice channel “a portion of the speakers voice is cutoff due to the requirement to complete the GPS processing” or that speech is uninterrupted with the disadvantage that GPS processing will not be successfully completed. *See* col. 8, lines 46-52. This is opposite of “transmitting ... digital data ... without significantly interrupting human speech” because Krasner either completely disables and cuts-off a voice conversation, or he fails to complete GPS processing. Moreover, Krasner never discloses

"*transmitting* ... digital data ... without significantly interrupting human speech;" Krasner only discloses enabling a GPS *receiver* to allow GPS processing. *See, e.g.*, col. 6, lines 51-62.

Accordingly, because Krasner fails to disclose, teach or suggest each and every limitation of claim 1, a *prima facie* anticipation rejection has not been established, and withdrawal of this rejection is respectfully requested. *See, e.g., Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference").

Moreover, aside from the novel limitations recited therein, claims 5-13, being dependent either directly or indirectly upon allowable base claim 1, are also allowable for at least the reasons set forth above with respect to claim 1. Withdrawal of the rejection of these claims is therefore courteously solicited.

### C. Claims 27, 29, & 30

The rejection of independent claim 27 was grouped in a common rejection with independent claim 1. Although claims 1 and 27 are within the same application, the scope of claim 27 is distinct from the scope of claim 1. In fact, the elements and limitations of independent claim 27 were not addressed in the Office action. Until the Office can satisfy its burden of presenting a *prima facie* case of anticipation by demonstrating that each and every limitation of claim 27 is taught in Krasner, the rejection of claim 27 must be withdrawn.

Further, claim 27 reads:

A multi-mode digital wireless communication system comprising:  
a call center having a server connected to the Internet and to a wireless telecommunication network;

the call center being operable to communicate with a remote unit via a plurality of modes selected from the group of modes including voice and data calls via the wireless telecommunication network,

wherein the call center is operable to receive a first data set comprising location data from the remote unit and to process the first data set to generate a second data set comprising location information; and

the call center is further operable to transmit the second data set to the remote unit.

Krasner fails to disclose, teach, or suggest "*a call center having a server connected to the Internet and to a wireless telecommunication network*" as recited in claim 27. Moreover, Krasner does not disclose a call center "*operable to communicate with a remote unit via a*

*plurality of modes* selected from the group of modes including *voice and data calls via the wireless telecommunication network*.” The closest thing Krasner discloses to a call center is a GPS base station linked to a cell site through a land-line or radio link, *see, e.g.*, col. 11, lines 49-52. However, Krasner’s GPS base station is not a call center as required in claim 27. A call center with the ability to communicate via a plurality of modes including data calls over the Internet and voice calls can be advantageous especially in emergency situations where the call center is a 911 emergency call center.

Accordingly, because Krasner fails to disclose, teach or suggest each and every limitation of claim 27, a *prima facie* anticipation rejection has not been established, and withdrawal of this rejection is respectfully requested.

Moreover, aside from the novel limitations recited therein, claims 29 and 30, being dependent upon allowable base claim 27, are also allowable for at least the reasons set forth above with respect to claim 27. Withdrawal of the rejection of these claims is therefore courteously solicited.

#### **D. Claims 31-43**

Independent claim 31 reads:

A method of sending geographic location data from a wireless telephone mobile unit comprising the steps of:  
at the mobile unit, receiving an external request to send location data;  
responsive to said external request, obtaining location data from a GPS unit coupled to the mobile unit;  
determining whether a voice mode is a primary transmission mode for location data transmission;  
if said voice mode is the primary transmission mode for said location data transmission, determining whether a call is currently active;  
if no call is currently active, establishing a voice mode call over a voice channel to a predetermined call center;  
converting the location data to a selected format for transmission over the voice channel; and  
muting the call and then transmitting the location data over the voice channel to the call center.

*1. Krasner fails to disclose "determining whether a voice mode is a primary transmission mode for location data transmission; if said voice mode is the primary transmission mode for said location data transmission, determining whether a call is currently active."*

Paragraph 32 of the specification provides an example of when the voice mode would be a primary mode for location data transmission.

Krasner fails to disclose "determining whether *a voice mode is a primary transmission mode for location data transmission.*" In fact, although Krasner discloses that the "[c]ommunication transceiver 109 transmits navigational data processed by the GPS receiver 130 through communication signals (typically RF) to a remote basestation," *see col. 3, lines 33-36*, Krasner does not even mention or suggest "determining ... a primary transmission mode for location data transmission" as recited in claim 31. Likewise, Krasner fails to disclose, teach or suggest "if said *voice mode* is the *primary mode* for said *location data transmission*, determining whether a call is currently active."

*2. Krasner fails to disclose "converting the location data to a selected format for transmission over the voice channel."*

Although Krasner discloses transmitting pseudorange data over communication link 162 to basestation 160, *see col. 3, lines 42-56*, Krasner fails to disclose, teach, or suggest "converting the location data to a selected format *for transmission over the voice channel*" as disclosed in claim 31.

*3. Krasner fails to disclose "muting the call and then transmitting the location data over the voice channel to the call center."*

Although Krasner discloses *disabling* voice data transmission and enabling GPS data processing, *see col. 8, lines 22-26*, Krasner fails to disclose, teach, or suggest "muting the call and then *transmitting the location data over the voice channel to the call center*" as recited in claim 31. Clearly Krasner would not be able to transmit location data over a voice channel call that is disabled.

Accordingly, because Krasner fails to disclose, teach or suggest each and every limitation of claim 31, a *prima facie* anticipation rejection has not been established, and withdrawal of this rejection is respectfully requested.

Moreover, aside from the novel limitations recited therein, claims 32-43, being dependent either directly or indirectly upon allowable base claim 31, are also allowable for at least the reasons set forth above with respect to claim 31. Withdrawal of the rejection of these claims is therefore courteously solicited.

**E. Claims 44-51**

The rejection of independent claim 44 was grouped in a common rejection with independent claim 31. Although claims 31 and 44 are within the same application, the scope of claim 44 is distinct from the scope of claim 31. In fact, the elements and limitations of independent claim 44 were not addressed in the Office action. Until the Office can satisfy its burden of presenting a *prima facie* case of anticipation by demonstrating that each and every limitation of claim 44 is taught in Krasner, the rejection of claim 44 must be withdrawn.

Further, claim 44 reads:

A method of automatically sending geographic location data from a wireless telephone mobile unit comprising the steps of:

- obtaining location data from a GPS unit attached to the mobile unit;
- establishing a voice mode call over a voice channel from the mobile unit to a predetermined call center;
- converting the location data to audio frequency tones;
- automatically muting any voice communication on the call;
- transmitting the converted location data in the voice channel to the call center; and
- automatically un-muting the voice communication on the call.

In contrast, Krasner never remotely suggests “converting ... location data to audio frequency tones.” Rather, Krasner discloses that the “[c]ommunication transceiver 109 transmits navigational data processed by the GPS receiver 130 through communication signals (typically RF) to a remote basestation,” *see* col. 3, lines 42-45, and makes no mention of “converting the location data *to audio frequency tones*” as recited in claim 44. Krasner also fails to disclose “*transmitting the converted location data in the voice channel* to the call center” referred to in claim 44. As explained before, Krasner teaches the opposite of “transmitting ... converted location data in the voice channel” because Krasner discloses that *voice data transmission is disabled* while GPS processing is enabled. *See* col. 8, lines 22-26.



Accordingly, because Krasner fails to disclose, teach or suggest each and every limitation of claim 44, a *prima facie* anticipation rejection has not been established, and withdrawal of this rejection is respectfully requested.

Moreover, aside from the novel limitations recited therein, claims 45-51, being dependent either directly or indirectly upon allowable base claim 44, are also allowable for at least the reasons set forth above with respect to claim 44. Withdrawal of the rejection of these claims is therefore courteously solicited.

### ***Conclusion***

In view of the foregoing, Applicant submits that all claims are in condition for allowance. Therefore, entry of the offered amendments and early issuance of the Notice of Allowance is respectfully requested. The Examiner is welcome to call the undersigned to discuss any aspect of this application. My direct-dial number (normal hours *Pacific Time*) is: 503-294-9189.

The Commission is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 19-4455.

Respectfully submitted,

**Airbiquity Inc.**

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